UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,488	10/12/2000	Kevin Frank Smith	SJ00-00-044	7862

7590   07/15/2003

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EXAMINER
LI, ZHUO H

ART UNIT	PAPER NUMBER
2186	

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Advisory Action	09/689,488	SMITH, KEVIN FRANK
	Examiner	**Art Unit**	
	Zhuo H. Li	2186	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may <u>only</u> be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

    (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

    (b) ☐ they raise the issue of new matter (see Note below);

    (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

    (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.
        NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *see attachment*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

    The status of the claim(s) is (or will be) as follows:

    Claim(s) allowed: _____.

    Claim(s) objected to: _____.

    Claim(s) rejected: _____.

    Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

Response to Arguments

1.   Applicant's arguments filed 6/23/2003 (paper no. 11) have been fully considered but they

are not persuasive.

In response to applicant's argument that Weinberger fail to disclose modeling the

dynamic operation of a cache as claimed in the present invention because the applicable

definition of "model" as provided by www.dictionary.com is "a work or construction used in

testing or perfecting a final product", it appears that Weinberger clearly teaches the prefetcher

prefetching the prefetch cache and building a dynamic data structure representing cache different

between cache misses and rough predictions (col. 2 lines 20-47 and col. 6 line 45 through col. 7

line 60), which can be broadly interpreted as testing and perfecting final product. In addition, it

appears that there are more than two definitions applicable for "model", as well as "modeling" in

accordance with www.dictionary.com such that the broad claimed limitations can be rejected by

Weinberger. Furthermore, claims 1, 21 and 29-32 merely state modeling the cache operation,

which fail to define it's functions as defined in claim 20 including examining data history,

assigning priority value, comparing priority value, determining size, periodically fetching I/O

rate, periodically fetching a hit rate, and determining reference residency time, thereby the

unduly broad claims are rejected by Weinberger.

In response to applicant's argument that Weinberger fail to disclose of providing a model

of the data elements stored within the cache, it appears that Weinberger teaches any cache line

that is cast out of the cache is inserted to the prefetch cache (col. 6 lines 26-37) so that it

recognizes the prefetch cache providing model of data elements stored within the cache. Note

while the claimed language does not clearly define how to provide model of data elements stored

in within the cache, i.e., each object in the remotely modeling for containing information of an

individual data element of the cache, wherein the information includes history represented by a

priority value assigned to the data element stored in the cache, and a time stamp indicating when

a data element first entered the cache. Thus, Weinberger is enough to reject the broad claimed

limitations.

In response to applicant's argument that Weinberger fail to disclose making a cache

management decision based upon the model, it appears that Weinberger teaches to make a

decision of either storing data in prefetch cache or issuing the request to the prediction queue

based upon data request already existing in the prefetch cache (col. 6 lines 7-25). Note while the

claimed limitations fail to clearly define cache management decision and how to make the cache

management decision based upon the model. Thus, Weinberger is enough to reject the broad

claimed limitations.

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